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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,628	03/10/2004	Robert K. Larsen	03761.073/5125.1 P	4752

7590 05/05/2006

Parsons Behle & Latimer
Suite 1800
201 South Main Street
P. O. Box 45898
Salt Lake City, UT 84111

EXAMINER

ROBERTS, LEZAH

ART UNIT	PAPER NUMBER
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1614

DATE MAILED: 05/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/797,628	Applicant(s) LARSEN ET AL.	
	Examiner Lezah W. Roberts	Art Unit 1614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>15 Mar 2005</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claims

Claim Rejections - 35 USC § 102 - Anticipation

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1) Claims 1-3, 6, 9-11, 13-15, 18 and 21-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Pellico (5,928,628).

Pellico teaches a two component dental bleaching system comprising a peroxide gel and an alkaline compound. The two components are mixed before use. One component comprises hydrogen peroxide (col. 3, lines 63-65), which encompasses the instant claims. The second component comprises an alkaline compound such as potassium hydroxide (col. 5, lines 8-12), which encompasses claims 2-3, 6, 14-15 and 18. Gelling agents, also known as thickeners, are incorporated into the compositions, which encompass claims 9 and 21. Glycerine is also used in making the compositions, which includes claims 10 and 22. A desensitizer is incorporated into the compositions to reduce tissue sensitivity to the composition (col. 4, lines 9-62), which encompasses claim 11. The peroxide gel and alkaline gel are packaged in separate barrels of a double-barrel syringe having a closure cap, which is replaced with a static mixer at the time of use. The application of manual force to the syringe actuator, at the time of use,

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forces the gels into and through the static mixer where the gels are thoroughly mixed and then dispensed into a dental bleaching tray. The syringe may be considered a vessel encompassing the instant claims. The compositions whiten teeth caused by the release of oxygen ions as recited in claim 23. The reference anticipates the instant claims insofar as it teaches two part compositions comprising peroxide in one component and potassium hydroxide in the other.

2) Claims 1-2, 4, 7, 9-10, 13, 16, 18-19 and 21-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Prussin et al. (US 3,966,090).

Prussin et al. teach antiseptic compositions packaged in a container wherein one compartment holds a hydrogen peroxide composition and the other an iodide releasing composition (see abstract). The iodide ion-releasing compound may be potassium iodide or sodium iodide (col. 1, lines 48-51). The two compositions are mixed when they are dispensed and used for cleaning. The compositions deliver iodine to the skin and the iodine has good disinfectant and antiseptic properties. The compositions also comprise glycerine (see examples), which encompasses claim 9-10. The reference anticipates the instant claims insofar as it teaches two part compositions comprising hydrogen peroxide in one component and potassium iodide in the other.

Claim Rejections - 35 USC § 103 - Obviousness

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

1) Claims 1-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pellico (5,928,628) in view of Prussin et al. (US 3,966,090).

Pellico is discussed above and teaches two part compositions comprising hydrogen peroxide in one component and potassium hydroxide in the other. The reference differs from the instant claim insofar as it does not teach potassium iodide in the component comprising potassium hydroxide.

Prussin et al. teach two part disinfectant compositions comprising hydrogen peroxide and potassium iodide. When the two components are mixed, iodine is released. Iodine has good disinfectant and antiseptic properties. The reference differs from the instant claim insofar as it does not teach potassium hydroxide in the component comprising potassium iodide.

It would have been obvious to one of ordinary skill in the art to have added the potassium iodide to the second component of the primary reference motivated by the

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desire to produce a dental composition that not only whitens teeth but has antiseptic properties as well, as disclosed by the secondary reference.

2) Claims 11-12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pellico (5,928,628) in view of Pellico (US 2003/0190293).

The primary is discussed above and teaches two part compositions comprising hydrogen peroxide in one component and potassium hydroxide in the other. The compositions include a desensitizer. The reference differs from the instant claim insofar as it does not teach the desensitizer as a salt.

Pellico (US 2003/0190293) teaches two part compositions, the first comprising hydrogen peroxide and the second comprising a basic solution with desensitizer, preferably potassium nitrate. Potassium nitrate is a salt and reduces tissue sensitivity and encourages compliance with the bleaching procedure (paragraph 0025), which encompasses claims 11-12. The compositions also comprise sodium fluoride and tetrapotassium pyrophosphate. The reference differs from the instant claims insofar as it does not teach the activator composition comprising a base but does teach it being basic.

It would have been obvious to one of ordinary skill in the art to have used the desensitizer potassium nitrate in the compositions of the primary reference motivated by the desire to produce a dental whitening composition that reduces tissue sensitivity and encourages compliance with the bleaching procedure, as taught by the secondary reference.

Obvious-Type Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-25 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-21 of copending Application No. 10/923,502. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims are coextensive because they read on a two-component cleaning system comprising hydrogen peroxide, potassium hydroxide and potassium iodide. The instant claims differ from the copending claims insofar as they recite a dental whitening composition as oppose to a dental cleaning composition.

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It would have been obvious to one of ordinary skill in the art to have used the compositions of the instant claims for the compositions of the copending claims because the dental whitening compositions whiten the teeth by way of bleaching and thus are a type of cleaner.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-25 are rejected.

No claims allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lezah W. Roberts whose telephone number is 571-272-1071. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Low can be reached on 571-272-0951. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

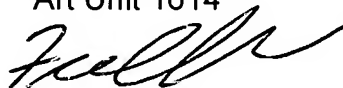
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lezah Roberts
Patent Examiner
Art Unit 1614

A handwritten signature in black ink, appearing to read "Leah Roberts", followed by a horizontal line.

Frederick Krass
Primary Examiner
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A handwritten signature in black ink, appearing to read "Frederick Krass", written in a cursive style.